

Title (en)

Method of operating in-bath smelting reduction furnace.

Title (de)

Verfahren zum Betreiben eines Schmelzreduktionsofens.

Title (fr)

Procédé pour opérer un four pour la réduction en bain de fusion.

Publication

EP 0418627 B1 19941214

Application

EP 90116879 A 19900903

Priority

- JP 7682890 A 19900328
- JP 22755489 A 19890904
- JP 28045989 A 19891027

Abstract (en)

[origin: EP0418627A1] A method of operating an in-bath smelting reduction furnace comprises the step of forming a slag zone in an in-bath smelting reduction furnace supplied with oxygen through a top lance and with agitation gas by bottom bubbling through tuyeres below the metal bath surface and the step of controlling the carbon material supply rate, the oxygen supply rate and the ore supply rate so as to maintain the apparent density of the slag within a prescribed range.

IPC 1-7

C21B 13/00

IPC 8 full level

C21B 11/02 (2006.01); **C21B 13/00** (2006.01)

IPC 8 main group level

C21B (2006.01)

CPC (source: EP US)

C21B 13/0006 (2013.01 - EP US); **Y02P 10/134** (2015.11 - EP US)

Citation (examination)

650)(3839), 7th November 1989; & JP - A - 1195209 (NIPPON STEEL) 07.08.1989 (cat. A)

Cited by

AU696273B2; US6039787A; EP1205565A1; EP0592830A1; DE4234974A1; US5480473A; DE19518343A1; EP0743368A1; US5891214A; US6171364B1; WO9735038A1

Designated contracting state (EPC)

BE DE ES FR GB IT LU NL

DOCDB simple family (publication)

EP 0418627 A1 19910327; EP 0418627 B1 19941214; AU 6212190 A 19910307; AU 629681 B2 19921008; CA 2024466 A1 19910305; CA 2024466 C 19960820; DE 69015077 D1 19950126; DE 69015077 T2 19950524; ES 2068298 T3 19950416; US 5078785 A 19920107; ZA 906892 B 19910626

DOCDB simple family (application)

EP 90116879 A 19900903; AU 6212190 A 19900903; CA 2024466 A 19900831; DE 69015077 T 19900903; ES 90116879 T 19900903; US 57801090 A 19900904; ZA 906892 A 19900829